REMARKS

By the present amendment, claims 1-4, 6-7, 9 and 11-12 have been amended to obviate the examiner's objections thereto and/or to further clarify the concepts of the present invention. Entry of these amendments is respectfully requested. The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated August 15, 2008.

In the Office Action, claims 1-12 were rejected under the second paragraph of 35 USC § 112 as being indefinite. In particular, it was alleged that claims 1 and 2 were indefinite regarding the relativity of the term "hardly soluble." In the dependent claims, it was asserted that noted recitations in claims 4, 6, 7, 11 and 12 were unclear. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

In response to this rejection, it is to be noted claims 1-3 have been amended to delete the phrase "water hardly soluble." In addition, dependent claims 4, 6-7 and 11-12 have been amended to address the specific concerns set forth in the Action.

As to the rejection of claim 8, this claim is directed to a calcium ion concentration which is preferable from the viewpoints of flavor and stability of the food additive composition. The calcium ion concentration is naturally varied by a concentration of calcium and a degree of dispersion of the

food additive composition. Therefore, the food composition must be dispersed by pulverization and dispersing and then must be adjusted to a predetermined concentration prior to the measurement.

As is apparent from Examples 1 to 15, the solid concentrations of calcium carbonate contained in the food additive compositions range from 25 to 45 % by weight. Accordingly, each food additive composition is adjusted to a predetermined concentration of a solid matter concentration of calcium and then the concentration of calcium ion is measured. As this predetermined concentration, 10 % by weight is adopted in the presently claimed invention.

In view of the above, it is submitted that each rejection has been addressed appropriately. Therefore, withdrawal of the rejection of claims 1-12 under second paragraph of 35 U.S.C. § 112 is respectfully requested.

Claims 1-12 were rejected under 35 USC § 103(a) as being unpatentable over the patent to Hojo et al further in view of the publications to Grossman and Klahorst. In making this rejection, it was acknowledged that the Hojo et al patent does not teach an additive composition as recited in claims 1 and 2 which includes a chelating agent. However, it then was then asserted that the inclusion in a food additive of ferrous gluconate, a suitable chelating agent as disclosed on page 11 of the subject specification, is taught by the cited Grossman publication. The Klahorst publication was cited for teaching a suitable amount of calcium to be included in a food additive.

Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. The subject invention generally is directed to a food additive composition which contains 100 parts by weight of at least one inorganic compound (A) selected from the group consisting of calcium compounds and magnesium compounds having a solubility in water at 20°C of not more than 0.1 g/100 g of water, 1 to 90 parts by weight of gum arabic (B) and 0.01 to 5 parts by weight of a chelating agent (C).

More particularly, the presently claimed invention provides a food additive composition comprising (A) water hardly soluble inorganic compound selected from calcium compounds and magnesium compounds, (B) gum arabic and (C) a chelating agent (claim 1), and the above (A), (B), (C), and further (D) an additive selected from emulsifiers, thickening stabilizers, modified starches, soybean polysaccharides and oligosaccharides (claim 2), which are excellent in dispersibility in liquid and flavor, and when added to foods, a food composition excellent in storage stability and flavor.

Specifically, the presently claimed invention includes the feature of the inclusion of a chelating agent to prevent thickening and gellation caused by reaction of calcium ions with protein

contained in foods such as a food additive as is set forth on page 4, lines 1 to 7; page 11, line 16 to page 12, line 14 of the present specification. It is submitted that such a food additive composition is not taught or suggested by the patent to Hojo et al or the publications to Grossman and Klahorst, whether taken singly or in combination.

In particular, the Hojo et al patent is directed to a food additive slurry or powder composition comprising (A) at least one agent selected from calcium carbonate, calcium phosphate and ferric pyrophosphate, and (B) gum arabic. However, the Hojo et al patent essentially differs from the presently claimed invention in that the patent does not require, among other things, a chelating agent.

It is submitted that this difference is significant. In this regard, specific attention is directed to, for example, the food additive composition of Example 3 of the present specification where a chelating agent (succinic acid 2K) is added, while in the food additive composition of Comparative Example 3, a chelating agent is not added as is set forth in Tables 1 and 2.

As is to be specifically noted, in a magnesium-enriched whitener of Example 33 containing the food additive composition of Example 3, even after 3 months, the amount of precipitate is evaluated as "3" (precipitate is slightly observed). In contrast, in a magnesium-enriched whitener of Comparative Example 23 containing the food additive composition of Comparative Example 3, after only 7 days, the calcium-enriched whitener gelled as is shown by Tables 6 and 7. From this

data, it is apparent that, by adding a chelating agent, it is possible to provide a food additive composition suitable for foods like a whitener and the like which requires a long relishing period.

Consequently, the Hojo et al patent, as it were, sets forth a prior art problem to be solved, that is, it is not suitable for foods such as a whitener and the like requiring a long relishing period, and just corresponds with a food additive composition of Comparative Example 3 as mentioned above in the present specification.

It is noted that the Action asserts that, "Hojo teaches at column 11 lines 4-8 that the food additive may contain ferrous gluconate, i.e. a chelating agent as instantly claimed." However, the Hojo et al patent is concerned with a food additive composition for enriching calcium and/or iron, and ferrous gluconate is only mentioned as a water-soluble iron which may be used conjointly with a water-difficultly soluble iron of the Hojo et al patent. That is, ferrous gluconate is only mentioned as one of many sources of iron. Therefore, it is not taught as a chelating agent which improves stability of a food additive composition used in foods such as a whitener and the like requiring a long relishing period by decreasing a calcium ion concentration damaging the stability of the food additive composition of the presently claimed invention. Furthermore, no examples of a food additive containing both gum arabic and a chelating agent are disclosed in the Hojo et al patent.

Further, it was asserted with respect to the secondary publications to Grossman and Klahorst that:

> "Grossman teaches that the recommended daily amount of iron in 2001 for males ranged from 8-11 mg per day and for females 8-18 mg per day. (page 3)
>
> Page two of the Klahorst publication teaches that the recommended daily amount of calcium in 2001 was 1000-1300 mg per day. ... One would have been further motivated to include an amount of iron to calcium in the nutritional additive composition based upon the recommended daily amounts of iron and calcium, so that the nutritional additive would fulfill the requirements for both minerals simultaneously; thus as the RDA of calcium: iron was 1300:8 or 100-0.6 to 100:18 or 100:1.8 as taught by the Grossman and Klahorst publications, at the time the invention was made, one would have been motivated to include 0.6-1.8 parts of ferrous gluconate i.e. an iron source per 100 parts of calcium carbonate, i.e. a calcium source."

In response, it is submitted that the Grossman and Klahorst publications do nothing more than show daily amounts of iron and calcium, and thus do not supply the teaching deficiencies of the Hojo et al patent.

As explained above, ferrous gluconate disclosed by the Hojo et al patent is no more than a

source of iron. Therefore, one of ordinary skill in the art would not foresee to make a food additive composition stable by adding such ferrous gluconate disclosed as a source of a nutritional iron so that a calcium ion concentration damaging the stability is decreased. As set forth previously, the presently claimed invention and the Hojo et al patent are essentially different and the patent is only a prior art disclosure having drawbacks which are solved by the presently claimed invention.

As a consequence, one of ordinary skill in the art would not be led to combine the teachings of the three publications in the manner in which were done in the rejection. Specifically, one of ordinary skill would not be motivated to use the iron supplement as taught by the Grossman publication in a food additive such as disclosed in the Hojo et al patent. It is well established principle of U.S. patent practice that the prior art must contain some suggestion for combination since, without such, any combination is pure speculation on the part of the examiner and is based on a prohibited hindsight reconstruction from applicants' own disclosure. Therefore, it is submitted that the subject claims are not obvious over the Hojo et al patent alone or in combination with the Grossman and Klahorst publications.

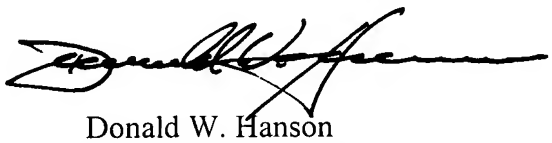
For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103 and allowance of claims 1 through 12 as amended over the cited patent publications are respectfully requested.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

KRATZ, QUINTOS & HANSON, LLP



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Enclosures: Petition for Extension of Time

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